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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,135	09/29/2003	Michael J. Brookman	30552/39676A	5725
4743	7590	07/31/2006		
MARSHALL, GERSTEIN & BORUN LLP 233 S. WACKER DRIVE, SUITE 6300 SEARS TOWER CHICAGO, IL 60606			EXAMINER LEWIS, AARON J	
			ART UNIT 3743	PAPER NUMBER

DATE MAILED: 07/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,135

Applicant(s)

BROOKMAN, MICHAEL J.

Examiner

AARON J. LEWIS

Art Unit

3993

3143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,3,4,6-10,13,15,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartels & Rieger (DE 3512644A1) in view of Hubner ('518) and Wilcox or Mucha (DE19503027).

The differences between Bartels & Rieger and claim 1 are means adapted to move said ambient air into said filter system, through said filter medium in said filter system and thence into operative relationship with a user of the apparatus and a switch associated with the means to move and coupled to the valve assembly adapted to control energization of the moving means in conjunction with operation of the valve assembly.

Hubner, in a breathing apparatus, teaches means (1,4-6) adapted to move said ambient air into said filter system, through said filter medium in said filter system and thence into operative relationship with a user of the apparatus for the purpose of overcoming fluid flow resistance of the filter medium thereby relieving a user from having to expend an inordinate amount of energy in an effort to draw breathable air through the filter medium (col.7, lines 25-32).

It would have been obvious to modify the breathing apparatus of Bartels & Rieger to include a means to move ambient air through the filter medium because it would have overcome the fluid flow resistance of the filter medium thereby relieving a user from having to expend an inordinate amount of energy in an effort to draw breathable air through the filter medium as taught by Hubner.

Wilcox, in breathing apparatus, teaches a switch associated with the means to move and coupled to the valve assembly adapted to control energization of the moving means in conjunction with operation of the valve assembly for the purpose of enabling a wearer to switch modes of operation when the operator determines that ambient air contains low oxygen or dangerous non-filterable gases (see page 1, col.2 under the heading "OPERATION"). The switch in Wilcox eliminates the need to manually manipulate both the valve and the blower motor in order to change modes of operation.

It would have been obvious to modify the valve assembly of Bartels & Rieger to include a switch to enable a wearer to change modes of operation because it would have eliminated the need to manually manipulate both the valve and the blower motor in order to change modes as taught by Wilcox. To the extent, if any, that Wilcox may not teach the movement of the valve in combination with adjustment of a blower by the single switch, resort is had to Mucha, in a breathing apparatus, which teaches both the movement of a changeover valve and adjustment of a blower by a single controller device.

As to claims 3,10, the face mask (see abstract) of Bartels & Rieger is adapted to tightly fit a wearer inasmuch as the breathing apparatus is intended for use in a noxious environment (i.e. used by firefighters).

As to claims 4,13, Bartels & Rieger (see figure) illustrates a first conduit means between said tank (11) and said face mask (i.e. at the terminal end of conduit 20), second conduit means between said filter/decontamination means (21) and said face mask, and valving means (19) operatively associated with said conduit means adapted to control the flow of cleaned air from said filter/decontamination means (21) or air from said tank (11) to said user. That is, the conduit extending between the tank and valve (19) constitutes a first conduit means while the conduit extending between filter (21) and valve (19) constitutes a second conduit means.

As to claims 6,15, Bartels & Rieger as modified by Hubner and Wilcox or Mucha as discussed above with respect to claim 1 also teaches a one-way exhaust valve (#3 of Mucha) operatively associated with the face mask.

As to claim 7, Wilcox teaches the switch being user actuable.

As to claims 8,16, Wilcox (see page 1, col.2 under the heading "OPERATION") and Mucha (see abstract) teach the switch being coupled to the valve assembly to energize the moving means when the valve assembly is set to control the flow of cleaned air from the filter system and to de-energize the moving means when the valve assembly is set to control pressurized air from the pressure tank.

Claim 9 is substantially equivalent in scope to claim 1 and is included in Bartels & Rieger in view of Hubner and Wilcox or Mucha for the reasons set forth above with respect to claim 1.

3. Claims 2,11,12,14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartels & Rieger in view of Hubner and Wilcox or Mucha (DE19503027) as applied to claims 1,3,4,6-10,13,15,16 above, and further in view of O'Connor ('951).

The difference between Bartels & Rieger as modified by Hubner and Wilcox or Mucha and claim 2 is plural filter/decontamination elements.

O'Connor, in a breathing apparatus, teaches plural filter/decontamination elements (11 and col.3, lines 30-42) for the purpose of increasing the filtering efficiency of the breathing device.

It would have been obvious to further modify the filter/decontamination element of Bartels & Rieger to include plural filter/decontamination elements because it would have increased the filtering efficiency of the breathing device as taught by O'Connor.

As to claims 11 and 12, O'Connor teaches the filter medium including a mesh and a vapor/gas filter medium (col.3, lines 33-35).

Claim 14 is substantially equivalent in scope to claim 2 and is included in Bartels & Rieger as further modified by O'Connor for the reasons set forth above with respect to claim 2.

Response to Arguments

4. Applicant's arguments filed 05/05/2006 have been fully considered but they are not persuasive. In response to applicant's arguments against the references individually,

one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant's arguments regarding Mucha (fig.4) are not persuasive because Mucha (page 3 of translation, lines 16-17) expressly discloses that the embodiment of fig.4 is in contrast to the one described above; therefore, the blower of Mucha runs continuously only in the fig.4 embodiment and runs selectively responsively to controller (12) in the previously described embodiment.

Wilcox (page 1) discloses two operating modes (1) filtered air mode OR (2) compressed tank air mode. The switch in Wilcox enables a user to switch between these two modes. Given that the blower is powered by a battery having limited operating life (page 1, col.1 under "Features"), the chemical filter remains sealed from the outside environment during the compressed tank mode (page 1, col.2, last paragraph) and the enhanced remote control module (page 2, last entry under "Accessories") controls blower speed, it stands to reason that the blower is not operative during the compressed tank mode. That is, the switch referred to in Wilcox enables a user to turn off the battery powered blower (to preserve the batteries and prevent further contamination of the filter) and enable the compressed tank mode.

Further, the language of independent claims 1 and 9 recite "...in conjunction with operation of the valve assembly..." does not structurally distinguish from the overall teachings of prior art. The combination of Bartels & Rieger as modified by Wilcox and

Art Unit: 3993

Mucha teach a controller (12 of Mucha) that switches between electric blower/compressed air modes responsive to sensing the purity of air from the filter medium is not at an acceptable level. The controller (12) is Mucha is illustrated as being electrically coupled to each of the blower (8) and valve (4) to enable control of each device. Accordingly, a valve (4 of Mucha) and a blower (8) are operated "in conjunction" with each other.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON J. LEWIS whose telephone number is (571) 272-4795. The examiner can normally be reached on 9:30AM-6:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HENRY A. BENNETT can be reached on (571) 272-4791. The fax phone

Art Unit: 3993

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


AARON J. LEWIS
Primary Examiner
Art Unit 3993

Aaron J. Lewis
July 21, 2006